

six skulls, yellowish in the other two; in *lockwoodi* all are strong yellow. Molars not appreciably different.

Dimensions of the type:—

Head and body 390 mm.; tail 376; hind foot 109; ear 82.

Skull: greatest length 96; condylo-incisive length 89; zygomatic breadth 46; nasals 35×12.5 ; upper molar series (alveoli) 21.5.

Hab. as above.

Type. Adult female. B.M. no. 20. 8. 4. 57. Original number 984. Collected 30th March, 1920.

This mountain chinchilla, although very like *L. lockwoodi*, differs from it by so many details that it evidently needs description as new. In making the comparison I have had available five examples of *lockwoodi* and six of *famatine*, and the differences, such as they are, are perfectly uniform throughout the series.

The three skins are all in changing pelage, the new winter fur—grey—coming up among the old faded summer coat, which is of a dull drab-colour. Neither winter nor summer fur agrees in colour with that of *lockwoodi*, of which our available specimens are in fresh summer coat.

9. *Galea comes*, Thos.

♂. 912, 928; ♀. 932, 963. La Invernada.

10. *Marmosa elegans pallidior*, Thos.

♂. 964, 991, 1005, 1012; ♀. 1009. La Invernada and Potrerillo.

XLVII.—*On Mammals from Ceram.*

By OLDFIELD THOMAS.

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THE British Museum has received a collection of small mammals—mostly rodents—obtained by Messrs. Charles, Felix, and Joseph Pratt in the island of Ceram while engaged on a zoological exploration of the Dutch East Indian Islands. The majority of the specimens were collected at an altitude of about 6000' on Mount Manusela, the high mountain in the centre of the island.

Although a certain number of specimens from the coast-regions of Ceram had been previously obtained, no collections have hitherto been formed from the central mountain region, and it is therefore not surprising that I found the present series of remarkable interest, for no less than seven species out of twelve are new to science, and include one—the local bandicoot—which needs distinction as a special genus. A second species of peculiar interest is the tree-rat—*Uromys fulgens*—which appears to mimic in colour the bright shoulder-mantle of the large fruit-bats which inhabit the island.

So far as I am aware, no notice on the mammals of Ceram has hitherto been published, while our only previous collection from there is a series of 108 specimens which were obtained in 1909 by the late Mr. W. Stalker. But these were almost all bats of widely-spread species, and having been collected at Wabaii, on the coast, give no indication of the faunistic peculiarity shown by the central highlands.

The present series is therefore of very great zoogeographical interest.

1. *Nyctimene cephalotes*, Pall.

♂. 37. Teloeti Bay.

Previously obtained in Ceram by Mr. Stalker.

2. *Hipposideros diadema*, Geoff.

♀. 33. Teloeti Bay.

3. *Rhinolophus* sp.

♂. 32. Teloeti Bay, S. Ceram.

4. *Rattus feliceus*, sp. n.

♂. 5, 14; ♀. 9, 29, 34. Mt. Manusela. 6000'.

"Trapped in thick jungle."

A large spinous-haired species with 2—2=8 mammae and a short, nearly naked, scaly tail.

Size large, much larger than in *R. mordax*, about as in *ratticolor*. Fur long, profusely mixed with spines, both hairs and spines on back about 20 mm. in length, and the latter about 0.5 in breadth. General colour above deep rufous-brown, grizzled with blackish, the hairs slaty with rich rufous tips; the longer bristle-hairs on the posterior back with buffy tips. Sides clearer rufous. Under surface white, not very sharply defined laterally, the hairs white to their bases. Head browner and less rufous than back. Ears comparatively

short, blackish brown. Hands and feet very thinly haired, flesh-coloured, the fine hairs whitish. Tail not as long as the body without the head, almost naked, the scales very large (about six rings to the cm.), uniformly pale brown. Mammæ 2—2=8, as in *R. mordax*, not 1—2=6, as in *R. leucopus**, *ringens*, and *ratticolor*.

Skull about as large as in *R. ratticolor*. Zygomata well thrown out anteriorly. Supraorbital beads well developed, passing backwards to the middle of the parietals, but not forming postorbital processes. Palatine foramina large and well open, their hinder edge level with the front root of *m*¹. Choanal opening broad, some way behind molars. Bullæ of medium size. Incisors somewhat opisthodont, index about 65°. Molars as usual.

Dimensions of the type:—

Head and body 210 mm.; tail 172; hind foot 45; ear 22.

Skull: greatest length 51 (in an older male 54·7); condylo-incisive length 48; zygomatic breadth 24; nasals 20·5; interorbital breadth 7·2; breadth of brain-case 19·5; palatilar length 25·5; palatal foramina 9·5; breadth of choanæ 4·6; upper molar series 8·5.

Hab. as above.

Type. Adult female. B.M. no. 20. 7. 26. 7. Original number 29. Collected February 1920.

This rat is easily distinguishable by its much greater size, reddish colour, and white belly from *M. mordax*, which alone of this group of Papuan species has its mammary formula.

The name of Mr. Felix Pratt, one of the members of the expedition, is remembered in the name given to this fine species.

5. *Rattus manuselæ*, sp. n.

♂. 1, 2, 3, 15, 20; ♀. 11, 19. Mt. Manusela. 4000'.
♀ in formalin. 6000'.

“Trapped in heavy jungle.”

A mountain representative of the widely spread *R. rufescens* group.

* At a time when the genus *Rattus* was called *Mus*, Alston (P. Z. S. 1879, p. 646) rightly renamed Gray's *Acanthomys leucopus*, on the ground that, being a member of “*Mus*,” the specific name was preoccupied by the American *Mus leucopus*, a species of *Peromyscus*.

But now that the genus bears the name *Rattus*—and, of course, the *Peromyscus* never had that name applied to it—Gray's name should apparently be reinstated, and the Queensland species long known as “*Mus terræ-reginæ*, Alst.,” be called *Rattus leucopus*, Gray. The female specimen, no. 67. 5. 6. 4, may be selected as its lectotype.

Size about as in *rufescens*. Fur thick, hairs of back about 15 mm. in length. General colour above rufescent brown, the head greyer. Under surface soiled greyish white, occasionally washed with yellowish, the hairs broadly slaty at base. Ears brown. Hands and feet whitish. Tail little or not longer than head and body, dark brown, little hairy. Mammæ 2—3=10 or 3—3=12.

Skull as compared with specimens of the same group from Wabaii in the lowlands, collected by W. Stalker, of about the same size, the nasals longer and more attenuated, supra-orbital ridges lighter, and more broad outwards on the parietals; choanal openings wider; projection forward of zygomatic plate less. Molars comparatively small and light.

Dimensions of the type:—

Head and body 160 mm.; tail 165; hind foot 37; ear 22.

Skull: greatest length 42; condylo-incisive length 39; zygomatic breadth 20; nasals 16.6; interorbital breadth 6.3; breadth between ridges on parietals 15.7; palatilar length 19.6; palatal foramina 7.9; breadth of choanæ 3.4; upper molar series 7.

Hab. as above.

Type. Adult male. B.M. no. 20. 7. 26. 13. Original number 20. Collected December 1919.

A member of the common widely spread *Rattus rattus* or *Rattus rufescens* group. Two specimens of the same group obtained by Mr. Stalker in the lowlands of Ceram have much shorter or coarser fur, more whitish underside, and in the skull are distinguishable by the details above mentioned. Apparently, therefore, the Manusela rat is a modified mountain form which may be given a special name.

6. *Rattus* sp.—*R. concolor* group.

♂. 27. Mt. Manusela. 4600'.

♂ in formalin. 6000'.

The local member of the small widely spread Oriental and Australasian group to which *R. concolor*, *browni*, *maorium*, *exulans*, and others belong. Characterized by small size and 2—2=8 mammæ. Not determinable more exactly at present.

7. *Stenomys ceramicus*, sp. n.

♂. 13, 16; ♀. 30. Mt. Manusela. 6000'.

"Trapped in heavy jungle."

Smaller than *S. verecundus*, larger than *S. niobe* and *klossi*. Palate unusually produced backwards.

General external appearance almost precisely similar to that of *S. niobe* and *klossi*. Fur similarly soft (hairs of back about 14–15 mm.). Colour equally dark and finely speckled, most nearly matching “olive-brown” of Ridgway. Under surface scarcely lighter; the tips of the hairs dull drabby. Ears short, blackish. Hands and feet dark brown; feet not so markedly slender as in the older known species. Tail about the length of the head and body, nearly naked, dark brown.

Skull in general shape like that of *S. verecundus*, with the same smooth slender muzzle and slight supraorbital beading. Palatal foramina small, far in front of the molars, their anterior third peculiarly narrowed. Posterior palate unusually produced backwards, almost suggesting this part in some of the smaller fruit-bats, such as *Cynopterus*, the mesopterygoid fossa broad and low, the lateral fossæ very shallow, and the entopterygoid processes very slender. Bullæ larger than in other species.

Incisors with the same flattening and suspicion of grooving found in *S. niobe*, but not in *S. verecundus*. Molars small, their structure as in the other species.

Dimensions of the type:—

Head and body 135 mm.; tail 140; hind foot 30; ear 18.

Skull: greatest length 38; condylo-incisive length 34·8; zygomatic breadth 16·6; nasals 15 × 4·2; interorbital breadth 5·7; breadth of brain-case 15; palatilar length 19·7; palatal foramina 6; postforaminal palate 11·1; breadth of choanæ 3·2. Upper molar series 6·2.

Hab. as above.

Type. Adult male. B.M. no. 20. 7. 26. 28. Original number 13. Collected January 1920.

This species, while superficially very like *S. niobe* and *klossi* of New Guinea, is really widely distinct, its elongated palate and larger bullæ indicating a very essential difference.

8. *Uromys fulgens*, sp. n.

♂. 31, 35. Teloeti Bay. Sea-level.

“Caught in a tree near sea-coast.”

A long-tailed and remarkably brightly coloured ochraceous species.

Size about as in the majority of the smaller species of the genus. Fur fine and velvety, hairs of back about 10 mm. in length, the few fine longer bristle-hairs about 18. General colour above uniform bright “ochraceous-orange,” perhaps

the brightest found in Muridæ; bristle-hairs blackish, too few to affect the general bright colour. Under surface sharply defined white, the hairs white to their roots. Whiskers very abundant, blackish. Eyelids dark brown. Ears short, a quite inconspicuous whitish patch behind their bases. Hands whitish, metacarpals slightly browner. Feet with buffy metatarsus and white digits. Tail very long, much longer than in other species; naked, finely scaled, pale brown.

Skull shorter, broader and higher than in most species, but with all the essential characters of the genus *Uromys*. Supra-orbital ridges well-developed, small postorbital processes present below the ridges at the hinder edge of the orbit. Zygomata evenly and widely convex outwards. Palatal foramina quite short, as usual in the genus, thus contrasting with the other two Ceram species. Palate ending behind further forwards than usual, opposite the front edge of m^3 .

Molars strictly as in normal *Uromys*.

Dimensions of the type:—

Head and body 150 mm.; tail 200; hind foot 34; ear 19.

Skull: greatest length 40; condylo-incisive length 37.5; zygomatic breadth 22.7; nasals 13; interorbital breadth 7; breadth of brain-case 16.5; height of crown from alveolus of m^2 12.7; palatilar length 17.2; palatal foramina 5.7; upper molar series 7.1 (7.6 in a second specimen with less worn teeth).

Hab. Coast of Ceram, at Teloeti Bay. Sea-level.

Type. Old male. B.M. no. 20. 7. 26. 20. Original number 35. Collected February 1920.

This brightly coloured animal stands out in startling contrast to the other animals of the collection, these being all dull-coloured and more or less "saturate" forms. No doubt most of them are from the heavy jungles of Mt. Manusela, while this is a coast animal; but I am disposed to believe that a second factor here comes into play. Inhabiting trees which would no doubt be commonly filled with fruit-bats of the genus *Pteropus*, whose bright yellowish mantles are of nearly the same colour as the *Uromys*, it would appear very probable that the latter really mimics the former, the rat gaining protection by its resemblance to the fruit-bats, which hawks generally leave severely alone. Cases of true mimicry are exceedingly rare among mammals, so that, if this supposition be correct, *Uromys fulgens* is an exceptionally interesting animal.

The unusually long tail of this species is no doubt correlated with its arboreal life.

9. *Uromys arosus*, sp. n.

♂. 6, 22; ♀. 4, 26, 28. Mount Manusela. 4000-6000'.

A middle-sized very dark-coloured species.

Size about as in the larger ordinary members of *Uromys*, exclusive of the giant species, *e. g.*, as in *bruijnii*, *moncktoni*, &c. Fur close and fine, hairs of back about 13 mm. in length. General colour above dark coppery brown (rather warmer than "mummy-brown"), somewhat variable in tone, often becoming rusty on the rump. Under surface scarcely lighter, the hairs dark slaty for three-fourths their length. Hands and feet brown, a few lighter hairs on the wrists. Tail shorter than head and body, naked, scaly, blackish brown.

Skull of normal shape, not specially broadened. Supra-orbital edges sharply square, and in one case with a tendency to overhanging ledges. Palatal foramina rather long for this genus, nearly approaching the level of the front root of m^1 . Hinder edge of palate level with the middle of m^3 . Molars unusually large in proportion to the size of the animal, contrasting markedly with those of the other Ceram species in this respect.

Dimensions of the type:—

Head and body 150 mm.; tail 138; hind foot 31; ear 18.

Skull: greatest length 38; condylo-incisive length 35; zygomatic breadth 19; nasals 14.3; interorbital breadth 5.7; breadth of brain-case, 15.8; height of crown from base of m^2 10.5; palatilar length 16.5; palatal foramina 6.5; upper molar series 7.8.

Hab. as above.

Type. Adult female. B.M. no. 20. 7. 26. 24. Original number 26. Collected February 1920.

This species is distinguished from any of the Papuan forms by its dark colour, longer palatal foramina, and proportionally heavy teeth. A young specimen of it was collected on Mt. Manusela in 1911 by Mr. E. Stresemann, and was presented by him to the British Museum.

10. *Uromys fraterculus*, sp. n.

♂. 10, 23. Mt. Manusela. 6000'.

"In thick jungle."

Size small. Fur long and thick, hairs of back nearly 15 mm. in length. General colour above as in the great mass of the Papuan species, a dull rufous, greyer on the head, richer on the rump. Under surface soiled buffy, the

hairs slaty with buffy tips. Ears short, pale brown. Hands and feet pale brownish with white digits. Tail proportionally long, less completely naked than usual, its minute hairs comparatively evident; irregularly mottled pale brown and white in the type, and in the paratype white for its whole length below.

Skull of normal proportions, in size and general build not unlike that of *U. gracilis*, though the brain-case is more swollen. Interorbital region narrow. Palatal foramina very long for this genus, reaching practically to the level of the front edge of m^1 . Hinder edge of palate level with the middle of m^3 . Molars small, narrow.

Dimensions of the type;—

Head and body 115 mm.; tail 155; hind foot 26; ear 18.

Skull: greatest length 33; condylo-incisive length 31; zygomatic breadth 16.4; nasals 12.5; interorbital breadth 4.8; breadth of brain-case 14; height from crown to alveolus of m^2 8.6; palatilar length 14.6; palatal foramina 6.3; post-foraminal palate 6.4; breadth of choanæ 2.5; upper molar series 6.6.

Hab. as above.

Type. Adult male. B.M. no. 20. 7. 26. 26. Original number 10. Collected January 1920.

Although looking very like some of the smaller Papuan species, this Ceram *Uromys* is readily distinguishable by its long palatal foramina and elongated tail. *U. obiensis*, the only species found to the westward of Ceram, has wholly white belly-hairs and a black tail; but that also has comparatively long palatal foramina.

11. *Phalanger orientalis*, Pall.

♂. 8. Mt. Manusela. 5000'.

♀. 36 (young). Teloeti Bay.

Judging from accounts given to Messrs. Pratt by their native hunters, it seems probable that a species of *Dactylopsila* is also found in Ceram.

12. *Rhynchomeles prattorum*, gen. et sp. n.

♂. 7. 21, 24; ♀. 12, 17, 18, 25. Mt. Manusela. 6000'.

"Trapped in heavy jungle in limestone formation. Country very precipitous. Native name 'Mabaya.'"

RHYNCHOMELES*, gen. nov.

Fur completely non-spinous. Upper incisors 4. Teeth very small.

Most nearly related to *Echymipera* and *Peroryctes*, agreeing with the former in the number of incisors and with the latter in the even more completely non-spinous character of the fur. Ears short. Proportions of feet and strength of claws as in *Echymipera*. Tail neither so short as in *Echymipera* nor so long as in *Peroryctes*.

Skull extraordinarily long and slender, the muzzle especially being quite unique in this respect. Other skull-characters about as in *Echymipera*.

Incisors $\frac{4}{3}$. Teeth all very small and delicate, widely spaced owing to the elongation of the muzzle; sectorial (p^3) more robust in build than the other teeth. Molars more triangular, owing to the hypocone being nearly obsolete instead of well-marked. Last molar especially small, its inner lobe much reduced, so that it does not reach inwards to the level of the inner lobes of the three anterior molariform teeth; in the older known genera it projects further inwards than they do.

Genotype. *Rhynchomeles prattorum*, sp. n.

With the incisive formula of *Echymipera*, this genus has even more completely spineless fur than *Peroryctes*, while the proportions of its claws and feet are more as in the former. It is unique in its excessively slender muzzle and reduced teeth, and evidently deserves a special genus of its own.

Rhynchomeles prattorum, sp. n.

Fur crisp, velvety, not spinous; hairs of back about 14 mm. in length. General colour above a uniform dark chocolate-brown, rather otter-like, not closely matching any colour in Ridgway; bases of the hairs whitish brown. Under surface practically the same or a little lighter—a strongly contrasted white patch of very variable size on the chest. Muzzle naked both on top and sides. Ears small, oval, brown. Head and forearms rather lighter than back, a white patch sometimes present on the wrist. Upper surface of hands nearly naked, the few fine hairs whitish. Feet pale brown. Tail rather less than twice the length of head, practically naked, blackish brown.

* As has been done in the case of *Brachymeles* and *Anuromeles*, the word *meles* is here taken as an essential part of the name *Perameles*, not as the Latin for badger.

Skull and teeth as described above.

Dimensions of the type:—

Head and body 320 mm.; tail 130; hind foot 65; ear 25.

Skull: greatest length 84.5; condylo-basal length 81; zygomatic breadth 27; nasals, length 37, breadth at middle 3.4, breadth behind 5; breadth of muzzle at p^1 6.5; interorbital breadth 15.3; intertemporal breadth 14; palatal length 52; palatine foramina 9.3; posterior palatine vacuities 7.5; front of canine to back of m^3 35, three anterior molariform teeth 10.5; transverse diameter of m^3 2.6.

Hab. as above.

Type. Adult male. B.M. no. 20. 7. 26. 34. Original number 21. Collected February 1920.

This mountain bandicoot is a very striking and interesting animal, widely different from any previously known form. It is at once recognizable by its crisp but not spinous fur and its extraordinarily long slender muzzle. I have much pleasure in connecting with it the name of the Pratt brothers, whose expedition has resulted in its discovery.

XLVIII.—*A remarkable new Genus of Lamellicorn Beetles.*

By GILBERT J. ARROW, F.Z.S., F.E.S.

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THE exceedingly remarkable little beetle here described was found in September 1897 by the French missionary, Father Cardon, at Chota Nagpore, in Bengal, and has lately been sent to me for investigation by M. René Oberthür. It was probably found in a termite nest, the curious termitophilous *Chetopisthes fulvus*, Westw., having been taken at the same time. While exhibiting certain characteristics of both the Coprinæ and Aphodiinæ, it is impossible to refer it to either, and it appears inevitable to regard it as the type of a new subfamily (to be called Aphodiocoprinæ). Although its general conformation and especially the widely separated middle coxæ appear to indicate the Coprinæ, the fact that the interval between the coxæ is formed by the mesosternum and not the metasternum, the double spurs to the hind tibia, the corneous mandibles and strange mouth-structure exclude it from that group. The mouth-structure, as well as the distant middle coxæ, equally excludes it from the Aphodiinæ.